

Date: Tuesday, 1/15/2008 3:04:37 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 212 X-TUBE LOW NARROW FWD
 Job Number : 36643
 Estimate Number : 13018
 P.O. Number :
 This Issue : 1/15/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D212664107
 First Issue : 1/7/2008 Type : LANDING GEAR Drawing Number : D212-664-147 UR-A
 Previous Run : 36642 Material : N/A
 Written By : Due Date : 2/5/2008 Qty: 1 Um: Each
 Checked & Approved By :
 Comment : Est Rev A New Issue 07.09.12 EC verified by: JLM

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D212-664-107 CHG001

2.0 D6019128 Crosstube Material



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6019-128 Crosstube B 32316

Check OD = 2.750"; ID = 2.125"

3.0 MORI SEIKI MORI SEIKI CNC LATHE LARGE



Comment: 1-TURN AS PER FOLIO FA705 & DWG D212-664-147,

FOLIO REV: AA

DWG REV: A

2-DEBURR AS REQUIRED

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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Job Number: 36643

Part Number: D212664107

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Polish entire outside surface of crosstube

AWM 08-01-23

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE 08/01/23

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

AWM 08-01-23

9.0

QC3/5

INSPECT WORK/WING WALK



Comment: Inspect work & Chemical conversion Coat

DP 8-2-4

10.0

BENDING

BENDING MACHINE



Comment: BENDING MACHINE

Bend tube as per Dwg D412-664-243 using CNC bender program 412-af and Folio FT010

EL / JD 8-2-5

11.0

QC8

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

08-02-06 (D)

12.0

D36591

CUFF



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

CUFF

Batch: B 37426

Not taken out of stock EL 8-3-10

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1.0 Lub to height. EL 8-2-6
1.1-Drill Rivet holes as per Dwg D212-664-147 using DT8972.

2-Drill pilot holes in tube as per Dwg D212-664-147

3-Ream hole to finish size in tube as per Dwg D212-664-147

8-2-12

| W/O: | | WORK ORDER CHANGES | | | | | |
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Job Number: 36643

Part Number: D212664107

Job Number:



Seq. #:

Machine Or Operation:

Description:

4-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-147

ANM 8-2-20

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



ANM 8-2-20



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat Tube & Cuffs as per QSI 005 4.1

15.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Sub 22 ①



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

16.0

QC5

INSPECT WORK TO CURRENT STEP



Sub 22 ①



Comment: INSPECT WORK TO CURRENT STEP

17.0

OUTSIDE SERV.10

OUTSIDE SERVICES -LG



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038Or

Issue P/O: 5791 LPI as per ASTM 1417

Level 2 Attach copy of NDT results to work order

CL08/02/25 ①

18.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage

Ensure copy of NDT results attached to work order.

CL 8/2/2 2 ①

19.0

QC5

INSPECT WORK TO CURRENT STEP



D212-664-107



Comment: Inspect for damage & ensure results are as per Dwg D212-664-203

CL 8/2/2 ①

20.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Rivet Cuffs as per Dwg D212-664-147. with Sika flex in Between tube & Cuff

A/R SIKAFLEX -241/-291 BATCH: M105 585

EL 8-3-20

| W/O: | | WORK ORDER CHANGES | | | | | |
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212 X-TUBE LOW NARROW FWD

Job Number: 36643

Part Number: D212664107

Job Number:



Seq. #:

Machine Or Operation:

Description:

21.0

CR3212406

CHERRY RIVET



Comment: Qty.: 44.0000 Each(s)/Unit Total: 44.0000 Each(s)

CHERRY RIVET

Batch: M106863

EL 8-310

22.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per QSI 005 4.2

ET 08-03-13

23.0

QC14

INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

Wrap in plastic bag to protect from scratches

M106863 08 03 14 (1)

24.0

D28931

Support



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Support 335579

M106863 08 03 17

25.0

D3595

Rubber Cushion (per sq ft)



Comment: Qty.: 0.8295 sf(s)/Unit Total: 0.8295 sf(s)

Rubber Cushion

Cut to .630" X 4.5" Qty 4

Batch: 35124

M106863 08 03 17

26.0

MS2192025

Clamp(per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Clamp

Batch: 107236

M106863 08 03 17

27.0

AN635A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

BOLT

batch M106242

M106863 08 03 17 (1)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Drawing Name: 212 X-TUBE LOW NARROW FWD

Job Number: 36643

Part Number: D212664107

Job Number:



Seq. #:

Machine Or Operation:

Description :

28.0

AN636A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

batch M106833

lu

29.0

MS21042L6

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

batch M106077

lu

30.0

AN960JD616

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Washer

batch M106883

lu

31.0

D34281

Placard



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Placard

batch 37088-

lu 8/3/19 ①

32.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1
Assemble as per Dwg D212-664-147

Instal support with magnobond 6398 per dwg D212-664-147,
cure for 12hrs before packaging.

Time & date of application: 8:30am exp: 04/2009
Batch: M106695

ml 08 03 17 ①

33.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

lu 08/03/00 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 08/03/20
 QA: N/C Closed: _____ Date: _____

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212 X-TUBE LOW NARROW FWD

Job Number: 36643

Part Number: D212664107

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Identify and pack for shipping as per PPP D212.664-107

Rev Draft

AS 08/03/2008

35.0

QC21

FINAL INSPECTION/W/O RELEASE



(1)

Comment: FINAL INSPECTION/W/O RELEASE

AS 08/03/2008

Job Completion



U 08-23-20

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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NOTE: Date & initial all entries

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|--|--|---------------------|--------------|
| DART AEROSPACE LTD | | Work Order: | 36643 |
| Description: Crosstube Assembly (205/212/412 Low Fwd) | | Part Number: | D212-664-147 |
| Inspection Dwg: D212-664-147 Rev: A | | Page 1 of 1 | |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

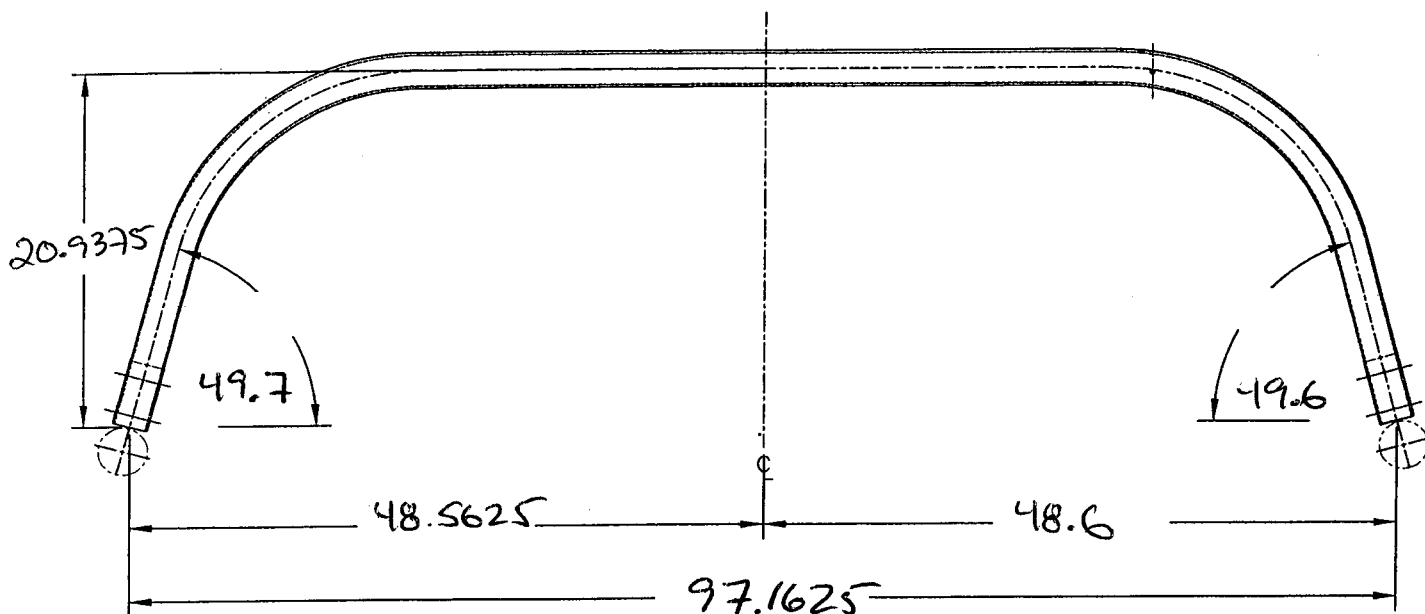
| Inspection Sheet Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|---------------------------------------|-----------|---------------------|--------|--------|-------------------------|----------|
| SIDE A | | | | | | |
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| Measured by: | | Audited by: | | Prototype Approval: | N/A |
| Date: | | Date: | | Date: | N/A |

| | | | | |
|------------|-------------|------------------------------|-------------------|-----------------|
| Rev | Date | Change | Revised by | Approved |
| A | | New Issue (P/O D212-664-107) | KJ/EC/DD | |

| | | | |
|---|--|---------------------|--------------|
| DART AEROSPACE LTD | | Work Order: | 36643 |
| Description: Crosstube Low Fwd (205/212/412) | | Part Number: | D212-664-107 |
| Inspection Dwg: D212-664-147 Rev: A | | Page 1 of 1 | |

| Required Dimension | Min | Max |
|--------------------|-------|-------|
| Height | 20.79 | 21.05 |
| 1/2 Span | 48.55 | 48.81 |
| Angle | 49 | 52 |
| Total Span | 97.1 | 97.62 |



| Comments |
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|-----------------|--------------------|
| QC15 Inspection | <i>[Signature]</i> |
| Date | |
| | 06-02-06 |

| Rev | Date | Change | Revised by | Approved |
|-----|------|-----------|------------|--------------------|
| A | | New Issue | | <i>[Signature]</i> |

PARTS LIST:

| Qty | Part Number | Description |
|-----|-------------------|---|
| X | D212-664-147 | CROSSTUBE ASSEMBLY (205/212/412 LOW FWD) |
| 1 | D6019-128 | CROSSTUBE |
| 2 | D2893-1 | SUPPORT |
| 4 | D3595-063-450 | RUBBER CUSHION |
| 2 | D3659-1 | CUFF |
| 4 | MS21920-25 | CLAMP (OR MS21920-26) |
| 44 | CR3212-4-06 | RIVET (OR M7885/3-4-06) |
| A/R | MAGNOBOND 6398 | ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE) |
| A/R | SIKAFLEX-2411-291 | SEALANT (OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT) |

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6019-128
FINISHED LENGTH = 126.53±0.020 (BEFORE BENDING/TRIMMING)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) PART IS SYMMETRIC ABOUT CENTERLINE.
- 6) WHEN MACHINING TAPER, RUN-OFF PART AT STOCK. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 7) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D., EXCEPT UP TO 10% IS ALLOWED IN AREA NOTED.
- 8) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 9) SCRIBE DART PART NUMBER AND BATCH NUMBER ON INNER SURFACE OF TUBE WITH A VIBRATING STYLUS.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) APPLY A 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2893-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 12) INSTALL MS21920-25 CLAMPS (OR -26) WITH D3595-063-450 RUBBER CUSHIONS TO SECURE D2893-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE CROSSTUBE SUPPORT.
- 13) TORQUE CLAMPS 80 TO 100 IN.-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.
- 14) INSTALL D3659-1 CUFF AFTER CHEMICAL CONVERSION COAT BUT BEFORE PAINT, WITH A LAYER OF SIKAFLEX-2411-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT BETWEEN CUFF AND CROSSTUBE. SEAL EDGE OF CUFF TO ENSURE NO GAPS.
- 15) TOUCH-UP HOLES WITH CHEMICAL CONVERSION COAT.

RELEASED
07.07.07

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 36643

| | | | |
|--|----------|---|--------------|
| A | | 07.07.07 | NEW ISSUE |
| DESIGN | gp | DRAWN BY | gp |
| COPYRIGHT © 2007 BY DART AEROSPACE LTD. | | DART AEROSPACE LTD. HAMMERSBURY, ONTARIO, CANADA | |
| CHECKED | gp | APPROVED | gp |
| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | | DRAWING NO. | REV. A |
| DATE | 07.07.07 | D212-664-147 | SHEET 1 OF 3 |
| | | TITLE | SCALE |
| | | CROSSTUBE (205/212/412 LOW FWD) NTS | |

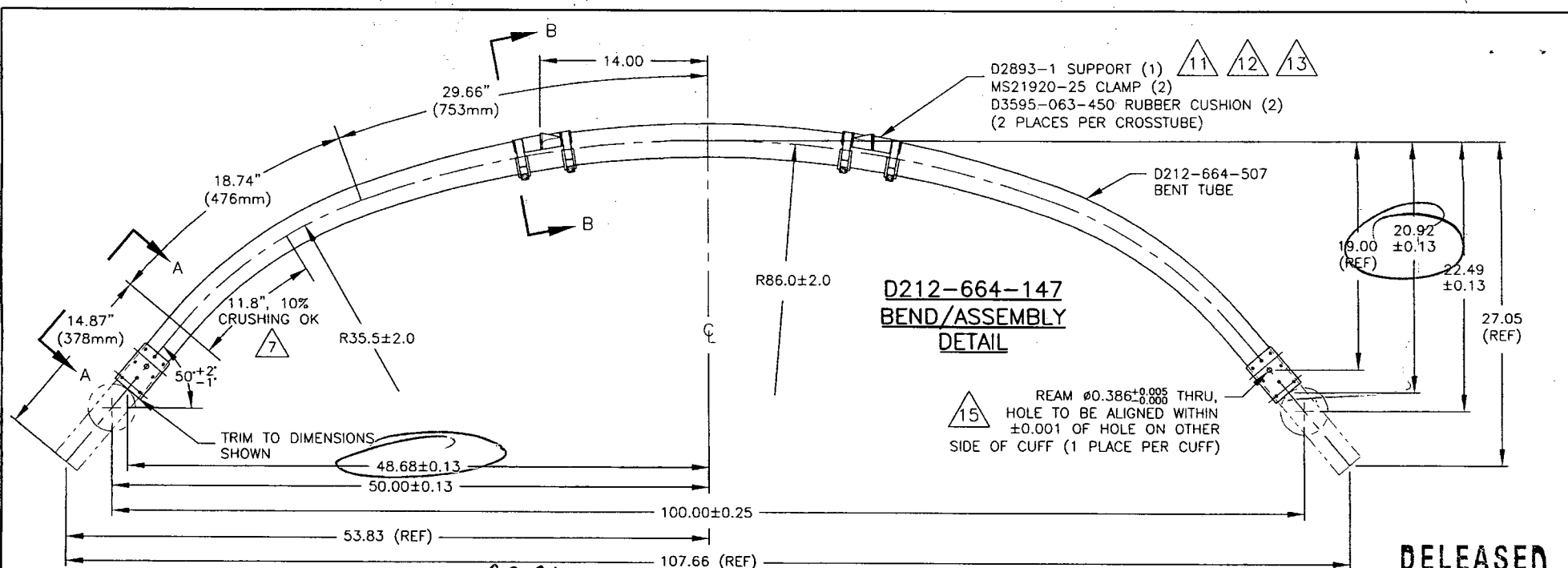
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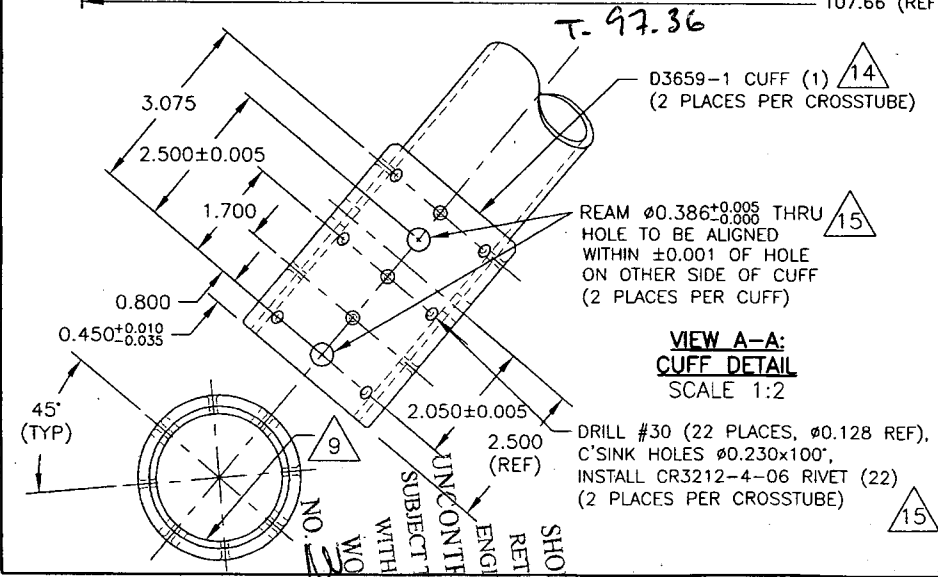
NOTE: Date & initial all entries



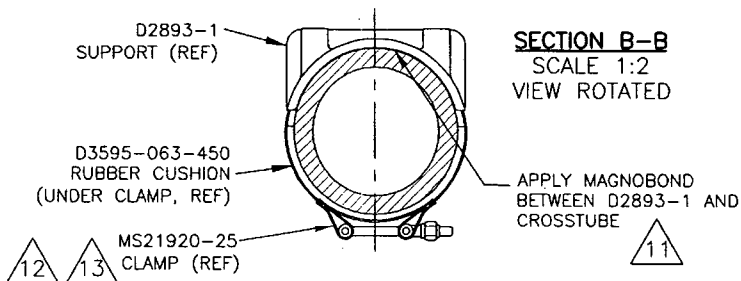
**D212-664-147
BEND/ASSEMBLY
DETAIL**

REAM $\phi 0.386 \pm 0.005$ THRU,
HOLE TO BE ALIGNED WITHIN
 ± 0.001 OF HOLE ON OTHER
SIDE OF CUFF (1 PLACE PER CUFF)

RELEASED
9.09.24



**VIEW A-A:
CUFF DETAIL
SCALE 1:2**



**SECTION B-B
SCALE 1:2
VIEW ROTATED**

| | | | | | |
|--|--|--|----------------|-----------------------------|--|
| COPYRIGHT © 2007 BY DART AEROSPACE LTD. | | DESIGN 9P | DRAWN BY 9P | DART | DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA |
| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | | CHECKED RH | APPROVED H | DRAWING NO. D212-664-147 | REV. A SHEET 2 OF 3 |
| DATE 07.07.07 | | TITLE CROSSTUBE (205/212/412 LOW FWD) | | SCALE 1:8 | |

NO. 30643
WORK ORDER
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
ENGINEERING
RETURN TO
SHOP COPY

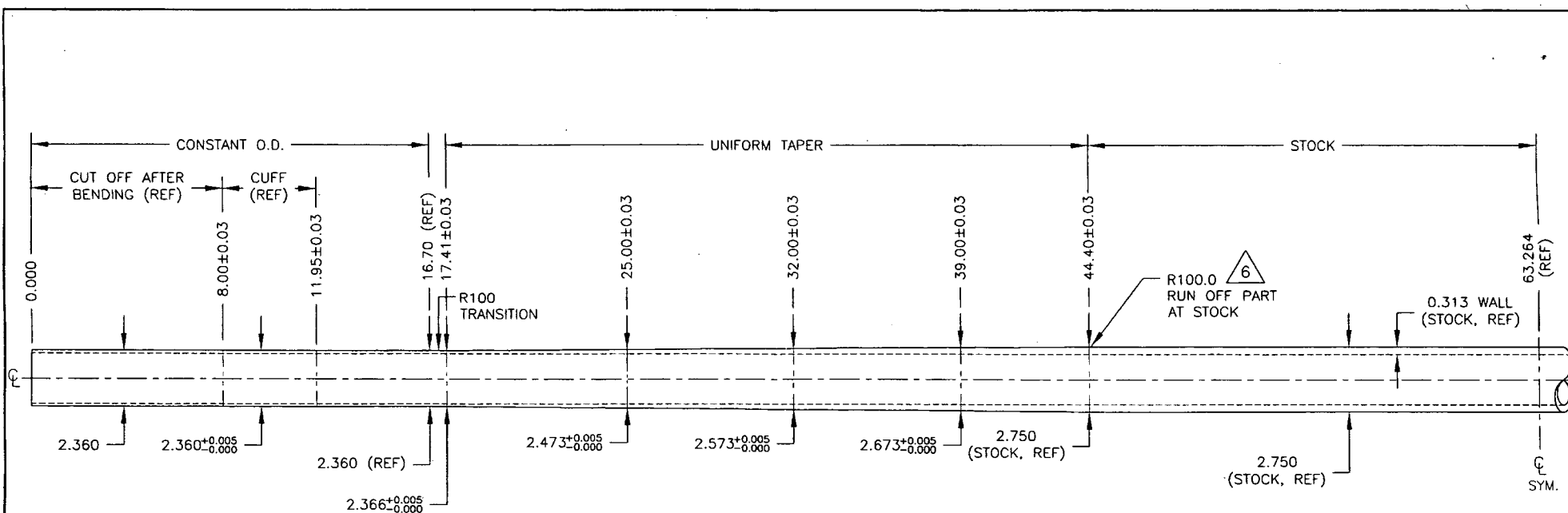
| W/O: | | WORK ORDER CHANGES | | | | | |
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| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



D212-664-147 MACHINING DETAIL

RELEASED
97.07.24

NO. 30643
WORK ORDER
WITHOUT NOTICE
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| | | | | | |
|--|--|--|----------------|-----------------------------|---|
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| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | | CHECKED 90 | APPROVED 90 | DRAWING NO. D212-664-147 | REV. A SHEET 3 OF 3 |
| DATE 07.07.07 | | TITLE CROSSTUBE (205/212/412 LOW FWD) | | SCALE 1:4 | |

| | | | |
|---|--|--------------|--------------|
| PART AEROSPACE LTD | | Work Order: | 36642 |
| Description: Crosstube Assembly (205/212/412 Low Fwd) | | Part Number: | 36643 |
| Inspection Dwg: D212-664-147 Rev: A | | | D212-664-147 |
| | | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

| | Inspection Sheet Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|--------|---------------------------------------|-----------|---------------------|--------|--------|-------------------------|----------|
| SIDE A | 2.360 | ±.010 | 2.361 | ✓ | | | |
| | 2.360 | ±.005 | 2.364 | ✓ | | | |
| | 2.366 | " | 2.370 | ✓ | | | |
| | 2.743 | " | 2.746 | ✓ | | | |
| | 2.573 | " | 2.576 | ✓ | | | |
| | 2.673 | " | 2.675 | ✓ | | | |
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| SIDE B | 126.53 | ±.020 | 126.54 | ✓ | | | |
| | | | | | | | |
| | 2.360 | ±.010 | 2.366 | ✓ | | | |
| | 2.360 | ±.005 | 2.364 | ✓ | | | |
| | 2.366 | " | 2.369 | ✓ | | | |
| | 2.743 | " | 2.746 | ✓ | | | |
| | 2.573 | " | 2.575 | ✓ | | | |
| | 2.673 | " | 2.675 | ✓ | | | |
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|-----------------------|-------------------------|---------------------|-----|
| Measured by: <i>R</i> | Audited by: <i>J.F.</i> | Prototype Approval: | N/A |
| Date: 08-01-21 | Date: 08/01/22 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|------|------------------------------|------------|----------|
| A | | New Issue (P/O D212-664-107) | KJ/EC/DD | |



LIQUID PENETRANT TEST REPORT

P - 1253 1

PAGE 1 OF 1

| | | | | | |
|------------------|--|-----------------|-------------------|-----------|---|
| CLIENT | DART AEROSPACE | DATE | FEB 22 2008 | TIME | AM <input type="checkbox"/> PM <input type="checkbox"/> |
| ATTENTION | LINDA LACELLE | ACUREN JOB No. | 188 08 1253 | | |
| ADDRESS | 1270 ABERDEEN ST HAWKESBURY, ONT. | PO/VO No. | | | |
| | | WORK LOCATION | HAWKESBURY | | |
| | | ACCEPTANCE STD. | ASTM 1417/QSI-038 | REV./DATE | 2005 |
| PROJECT | 212 LOW NARROW FWD, 407 HIGH AFT, 212/205 HIGH FED X TUBES | | | | |
| ITEM(S) EXAMINED | JOB #S 212-36641, 36643, 36772, 407-37008, 212/205-37271, 37274. | | | | |

| | | | | |
|-----------------|--|-----------|------------------------|----------------|
| JOB DESCRIPTION | PROCEDURE No. LT-0002 | REV./DATE | TECHNIQUE No. LT-TECH2 | REV./DATE |
| PART No. | D212664107/D407667205/D212664101 | | MATERIAL | ALODINED ALUM. |
| SCOPE | WET FLOURESCENT LIQUID PENETRANT INSPECTION CARRIED OUT ON 100% EXTERNAL SURFACE | | | |

| | |
|-----------------------|---|
| TEST DETAILS | |
| METHOD | <input checked="" type="checkbox"/> FLUORESCENT <input type="checkbox"/> VISIBLE |
| FAMILY BRAND | MAGNAFLUX |
| PENETRANTZL67 | MINIMUM DWELL TIME 45 MIN. |
| PENETRANT REMOVER H2O | MINIMUM DRY TIME >10 MIN. |
| DEVELOPER SKDS2 | MINIMUM DWELL TIME 10 MIN. |
| DEVELOPER TYPE | <input checked="" type="checkbox"/> NON AQUEOUS <input type="checkbox"/> AQUEOUS <input type="checkbox"/> DRY |

| | |
|---------------------|---|
| TEST SURFACE | |
| SURFACE CONDITION | <input type="checkbox"/> AS GROUND <input checked="" type="checkbox"/> AS WELDED <input type="checkbox"/> MACHINED <input type="checkbox"/> SHOT BLASTED <input checked="" type="checkbox"/> CLEAN BARE METAL |
| SURFACE TEMPERATURE | <input type="checkbox"/> < - 4°C/ 20°F <input type="checkbox"/> - 4°C/ 20°F TO 10°C/50°F <input type="checkbox"/> 10°C/50°F TO 52°C/125°F <input type="checkbox"/> > 52°C/125°F |

| | |
|----------|--|
| RESULTS- | <input type="checkbox"/> METRIC <input checked="" type="checkbox"/> IMPERIAL |
|----------|--|

FLUORESCENT LIQUID PENETRANT INSPECTION

CARRIED OUT ON 100% EXTERNAL

SURFACE ON:

212 LOW NARROW FWD X TUBE JOB#S:

36641, 36643, 36772.

404 HIGH AFT X TUBE JOB: 37008

212/205 HIGH FED X TUBE JOB#S: 37271, 37274.

RESULTS: NO INDICATION OF DEFECTS.

ITEMS ACCEPTABLE TO STANDARD

Scope of Services
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner operator and the owner operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

| | |
|----------------------------|----------------------|
| SIGNATURES | |
| CLIENT REPRESENTATIVE | DTR # E 21515 |
| TECHNICIAN (SIGNATURE): | REPORT REVIEWED BY: |
| NAME (PRINT): JASON HEWETT | NAME INITIALS |
| CGSB LEVEL 2 SNT LEVEL | CGSB LEVEL SNT LEVEL |
| CGSB REG. No 6156 | CGSB REG. No |

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